

Global Targets and Pledges

The Paris Agreement:

- Long-term temperature goal keeping the rise in mean global temperature to **well below 2 °C** (3.6 °F) above pre-industrial levels, and **preferably** limit the increase to **+1.5 °C** (2.7 °F).



- Emissions should be reduced as soon as possible and **reach net-zero by 2050**.
- Net-zero** is the balance between the amount of greenhouse gas produced and the amount removed from the atmosphere. (Net zero is achieved when the amount we add is no more than the amount taken away). This is different than Gross Zero which will stop the CO₂ emission all together.

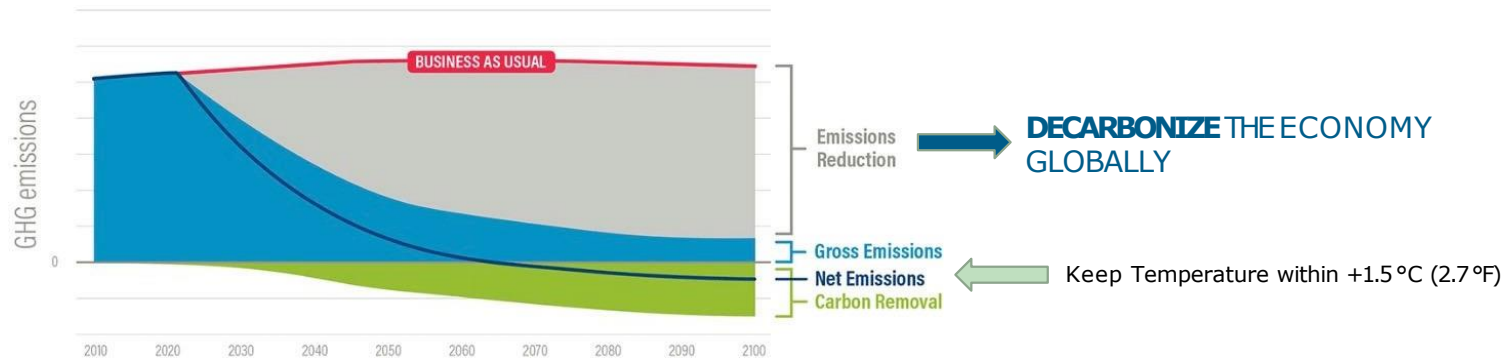


Fig. 3 –Remove Carbon to balance out emissions (source: World Resource Institute).

Which Path to Net-Zero –Renwables and Green H₂

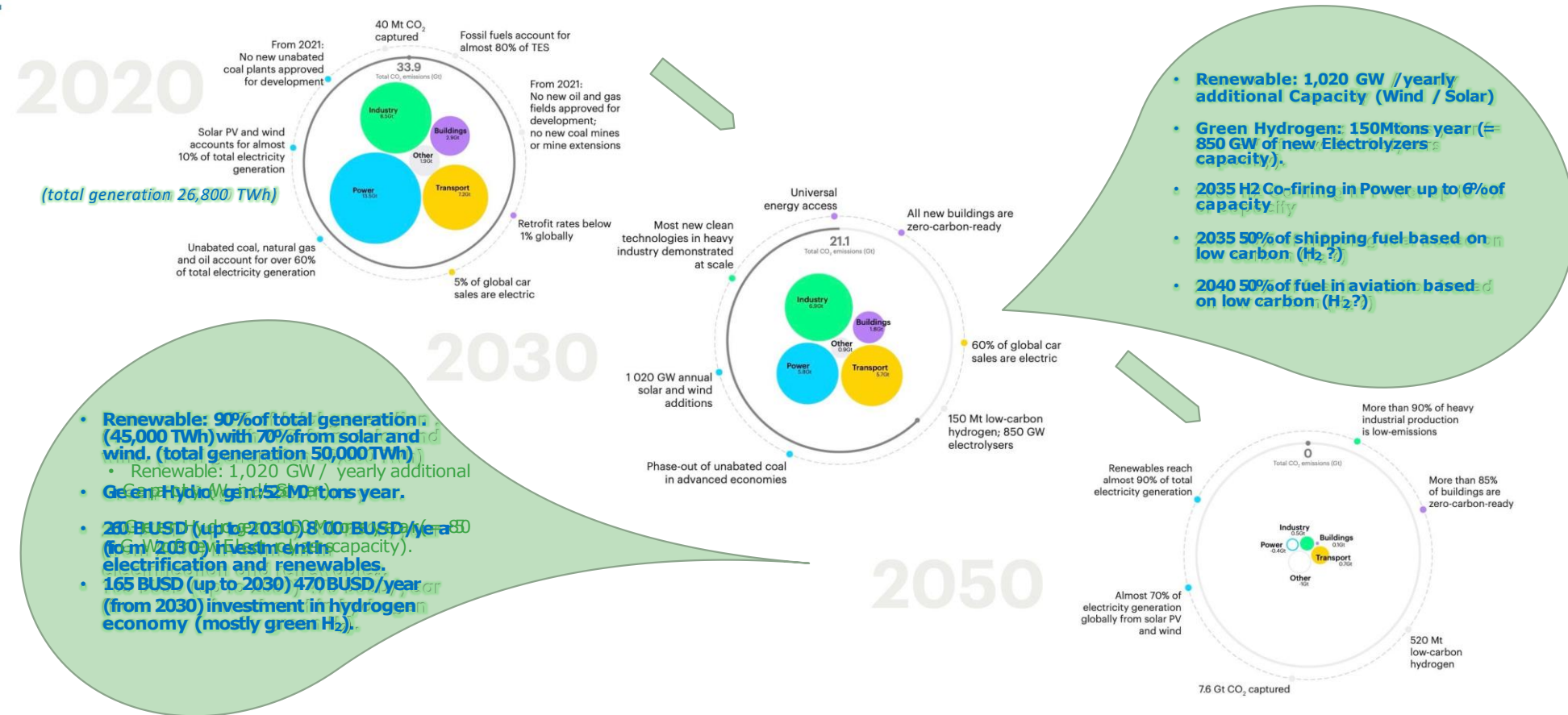


Fig. 4 A Global evaluation to what is required by Sector to reach net-Zero – Remove Carbon to balance out emissions (source: Net Zero by 2050 - A Roadmap for the Global Energy Sector. Edited by IEA 2021).

Are Renewables and Green H₂ Good for the Economy ?



Renewables – Predictable and fixed prices until end of the plant life. Tariffs refers to lowest tariffs in certain regions with good resource and financing conditions;

- Solar photovoltaic: in the range of **1.1 to 2.1 USDc/KWH**;
- Wind On-shore: in the range of **2.5 to 3.5 USDc/KWH**;
- Wind Off-shore: in the range of **6.5 USDc/KWH**;
- Dispatchable Solar (24/7): in the range of **7.1 USDc/KWH**;
- BESS (up to 4 hours): in the range of **5 to 6 USDc/KWH**



Fossil fuel – Subject to variable price of fuel (tariff below based on average gas and coal prices with cost of fuel included);

- CCGT: in the range of **7 to 11 USDc/KWH**;
- Coal: in the range of **3.5 to 6.0 USDc/KWH**;
- Oil fired: over **10 USDc/kWH**.



What about **Green Hydrogen** ?

- 2000: 1,000 USD/MWH;
- 2015: 250 USD/MWH;
- **2021: 100 USD/MWH**;
- 2030: 50 USD/MWH or approx. 2 USD/kg (parity with Oil at average price)
- 2035: 25 USD/MWH or approx. 1 USD/kg (parity with Gas at average price)



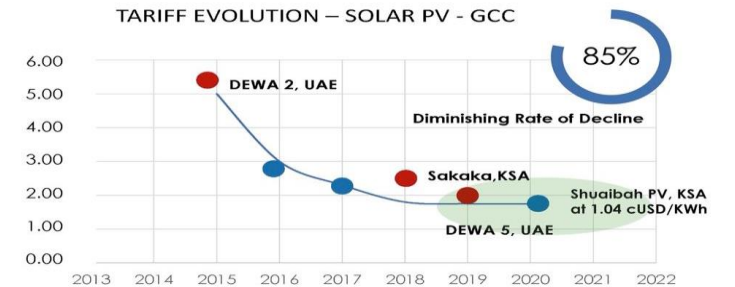
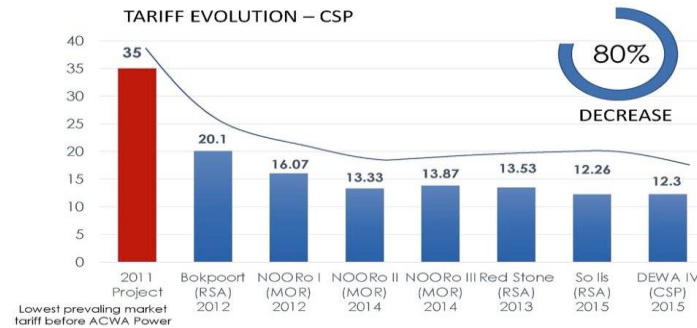
Solar Tariff Global Leader

ACWA Power is recognized for creating global benchmarks in solar tariffs. In 2015, we delivered a world record tariff at ~5.5 cUSD/KWh in Dubai, a breakthrough tariff that became a catalyst globally for Solar PV technology drive.

ACWA Power continued to challenge industry tariff standards-setting new benchmarks every year and in the span of 5 years, Solar PV has become the cheapest source of power, breaking the barrier of a LCOE of 1.04 cUSD/KWh in KSA.

By leading Solar CSP tariff reduction, ACWA Power has made this renewable, versatile solution technically and commercially viable in under 5 years. Round-the-clock dispatchable electricity from solar is made possible through chemical storage in molten salt.

In October 2020, ACWA Power's Bokpoort plant set a new solar record for operating a Solar CSP round the clock for 13 Days.





42 GW
Power



6.4 Mm³/d
Desal
water

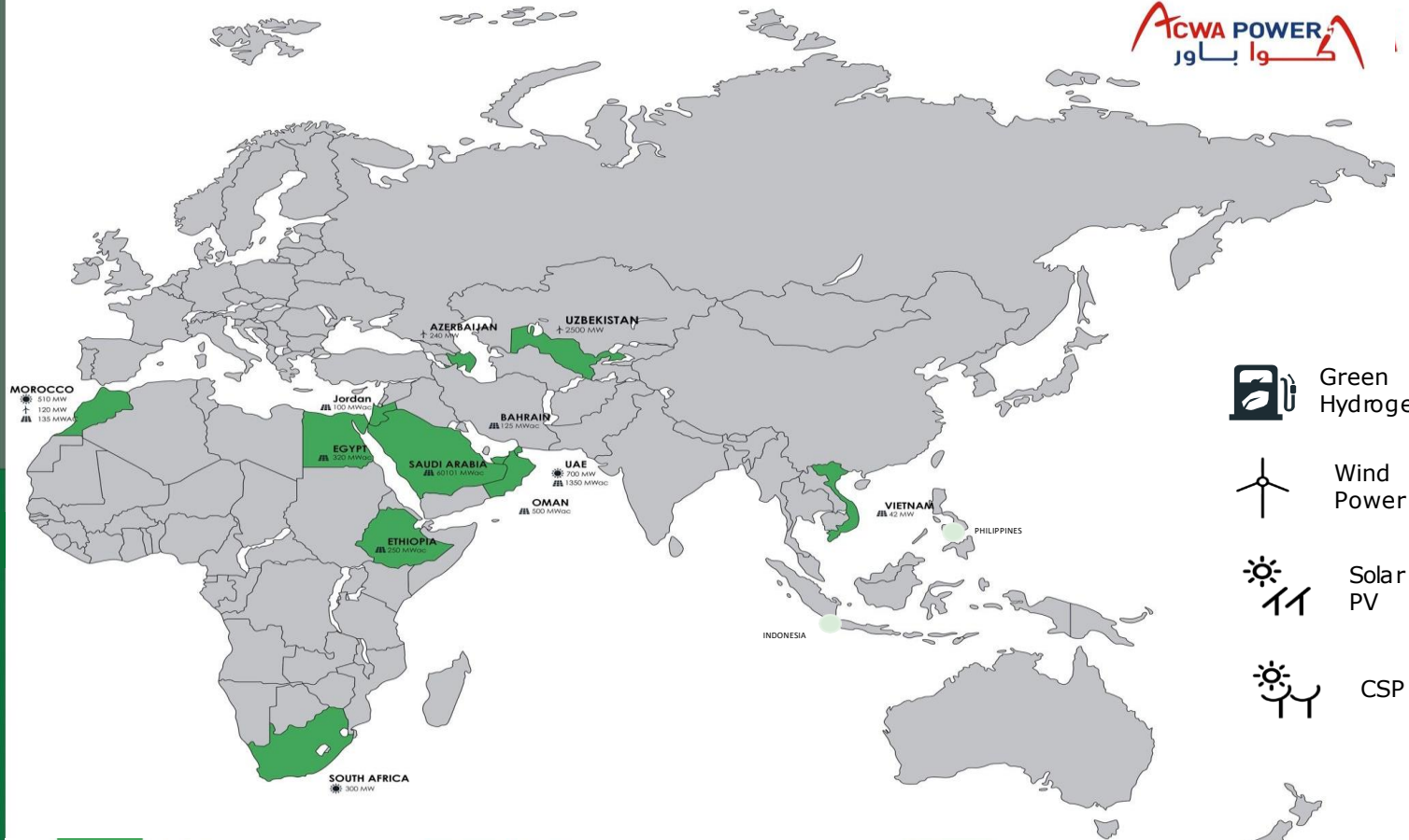
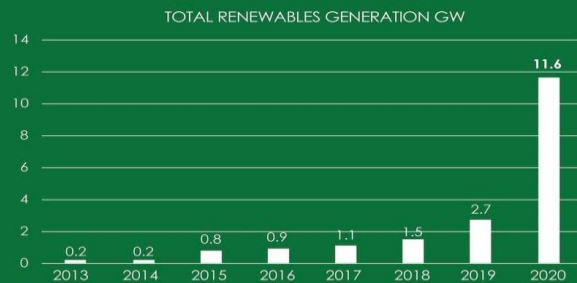


ACWA POWER Renewable Projects

**Total Investment Costs of Renewable
Portfolio: US\$ 22.75 billion**

Total Renewable Capacity: 13.7 GW

As on date



 **12**
Countries

 **27 Assets**
Operational 14
Under Construction 3
Advanced Development 10

 **30**
Projects

 **Green
Hydrogen**

 **Wind
Power**

 **Solar
PV**

 **CSP**